What is claimed is:

1. An oil burner system having an electric cord set coupled between a controller and a valve associated with a pump, the electric cord set operable to activate a solenoid valve associated with the pump, the electric cord set comprising a voltage or temperature independent timer circuit operable to activate the solenoid valve a predetermined period of time after a call for ignition signal is generated by the controller, wherein the predetermined time period is substantially constant with respect to variations in line voltage or in an ambient temperature in which the oil burner system resides.

2. The oil burner system of claim 1, wherein the timer circuit further comprises:

a bridge circuit having an input coupled to the solenoid valve, the bridge circuit adapted to receive a sinusoidal line voltage signal at the input and provide a rectified voltage signal at an output thereof;

a switch associated with the bridge circuit, and operable to permit current flow through the bridge circuit upon a closing of the switch, and further operable to prohibit current flow through the bridge circuit upon an opening of the switch; and

a substantially voltage independent trigger circuit operable to receive a control signal associated with the call for ignition signal from the controller and output an activation output signal to close the switch a predetermined time period after the control signal, wherein the predetermined time period is substantially independent of variations in the line voltage supplied to the oil burner system.

3. The oil burner system of claim 2, wherein the voltage independent trigger circuit further comprises:

a comparator circuit operable to compare two signals at inputs and output a signal to the switch based on the comparison;

a reference voltage circuit operable to generate a reference voltage which is a function of the line voltage, wherein the reference voltage is coupled to a first input of the comparator circuit; and

a line voltage dependent charging circuit operable to charge an output node between a first voltage potential and a second voltage potential at a rate which is a function of the line voltage, wherein the output node is coupled to a second input of the comparator circuit.

4. The oil burner system of claim 3, wherein the reference voltage of the reference voltage circuit and the charging rate of the line voltage dependent charging circuit are both a positive function of the line voltage, wherein an increase in the line voltage causes the reference voltage to increase and the charge rate to increase, respectively.

5. The oil burner system of claim 3, wherein the predetermined time period is determined by when the output node of the line voltage dependent charging circuit exceeds the reference voltage.

6. The oil burner system of claim 5, wherein the predetermined time period is substantially independent of line voltage by having a variation in the reference voltage caused by a variation in the line voltage compensated by a corresponding change in the charging rate of the output node of the line voltage dependent charging circuit.

7. The oil burner system of claim 2, wherein the voltage independent trigger circuit comprises:

a comparator circuit having a first and second input and one output, and operable to compare two signals at the inputs and provide a signal at the output which is based on a comparison of the two input signals;

a first charging circuit having an output node coupled to the first input of the comparator circuit, and operable to charge between a first voltage potential and a second voltage potential at a first charging rate; and

a second charging circuit having an output node coupled to the second input, and operable to charge between a third voltage potential and a fourth voltage potential at a second charging rate which is greater than the first charging rate, and wherein the second voltage is greater than the fourth voltage.

8. The oil burner system of claim 7, wherein the first charging circuit comprises:

a first resistor having a first terminal and a second terminal;

a first capacitor having a first terminal and a second terminal, and coupled in parallel with the first resistor; and

a second resistor having a first terminal and a second terminal, the second terminal coupled to the first terminals of the first resistor and the first capacitor, respectively, and forming a first charging node thereat, and wherein the first charging rate at the first charging node is a function of a resistance of the first and second resistors, a capacitance of the first capacitor, and the line voltage.

9. The oil burner system of claim 8, wherein the second charging circuit comprises:

a third resistor having a first terminal and a second terminal;

a second capacitor having a first terminal and a second terminal, and coupled in parallel with the third resistor; and

a fourth resistor having a first terminal and a second terminal, the second terminal coupled to the first terminals of the third resistor and the second

capacitor, respectively, and forming a second charging node thereat, and wherein the second charging rate at the second charging node is a function of a resistance of the third and fourth resistors, a capacitance of the second capacitor, and the line voltage.

10. The oil burner system of claim 9, wherein the first and second charging rates are both functions of the line voltage in the same manner, thereby making a comparison of the voltage at the first and second charging nodes substantially independent of the line voltage.

11. The oil burner system of claim 10, further comprising a half-wave rectification circuit coupled between the sinusoidal line voltage signal and the first and second charging circuits, respectively, wherein the half-wave rectification circuit is operable to half-wave rectify the sinusoidal line voltage signal input to the first and second charging circuits, thereby making the predetermined time period substantially independent of a frequency of the sinusoidal line voltage signal.

12. The oil burner system of claim 7, wherein the comparator circuit comprises a programmable unijunction transistor.

13. A timer circuit powered by a line voltage, comprising:

a charging circuit having a voltage coupled thereto which is a function of the line voltage, and an output node which charges at a first rate when the line voltage is less than a predetermined threshold, and charges at a second rate when the line voltage is greater than the predetermined threshold, wherein the second charging rate comprises a modulation of the first charging rate;

a reference voltage circuit operable to generate a reference voltage;

a comparison circuit operable to generate a signal indicative of a comparison between the output node of the charging circuit and the reference voltage, wherein a time period between when the line voltage is applied to the charging circuit and the signal indication that the output node has exceeded the reference voltage represents a delay time.

14. The timer circuit of claim 13, wherein the charging circuit comprises an RC network having a time constant associated therewith, wherein the first charging rate is a function of the RC network and the line voltage, and wherein the modulated first charging rate is a function of the RC network and a relatively fixed voltage associated therewith.

15. The timer circuit of claim 14, wherein the charging circuit further comprises a clamping circuit coupled across a portion of the RC network, wherein the clamping circuit is operable to clamp a voltage across the portion of the RC network when the line voltage exceeds the predetermined threshold.

16. The timer circuit of claim 15, wherein the clamping circuit comprises a zener diode having a zener breakdown voltage which is related to the predetermined threshold, and wherein the zener breakdown voltage comprises the reference voltage, and wherein when the line voltage exceeds the predetermined threshold, the zener diode breaks down and clamps the portion of the charging circuit to the zener diode breakdown voltage, thereby modulating the charging rate of the charging circuit.

17. The timer circuit of claim 13, wherein the reference voltage circuit and the comparison circuit comprises a zener diode, wherein when the output node of the charging circuit exceeds a zener diode breakdown voltage, the zener

diode breaks down and conducts current therethrough, thereby indicating that the output node exceeds the reference voltage.

18. The timer circuit of claim 13, further comprising a half-wave rectification circuit coupled between the line voltage and the charging circuit, wherein the half-wave rectification circuit is operable to half-wave rectify the line voltage input to the charging circuit, thereby making the delay time substantially independent of a frequency of the line voltage.

19. A timer circuit powered by a line voltage, comprising:

a first charging circuit having an output node which charges at a first charging rate, wherein the first charging rate is a function of the line voltage;

a second charging circuit having an output node which charges at a second charging rate, wherein the second charging rate is a function of the line voltage, and wherein the second charging rate is different than the first charging rate; and

a comparison circuit operable to generate a control signal which is indicative of when the output nodes of the first and second charging circuits are equal, and wherein a time period between when the line voltage is applied to the first and second charging circuits and the control signal indication comprises a delay time which is substantially independent of a magnitude of the line voltage.

20. The timer circuit of claim 19, wherein the first and second charging circuits comprise a first and second RC network respectively, wherein the first RC network has a first RC time constant associated therewith, and the second charging circuit has a second RC time constant which is different than the first RC time constant.

21. The timer circuit of claim 19, wherein the comparison circuit comprises a unijunction transistor.

22. A method of starting an oil burner system powered by a line voltage, comprising:

generating a call for ignition;

activating a motor, pump and ignition device generally concurrently based on the call for ignition;

initiating a timer circuit associated with a solenoid valve which is associated with the pump based on the call for ignition;

applying a voltage associated with the line voltage to a charging circuit within the timer circuit, thereby initiating a charging of a node at a first rate, wherein the first rate associated therewith;

comparing the node to a reference voltage; and

generating a control signal when the node is equal to or greater than the reference voltage; and

activating the solenoid valve to deliver fuel oil from the pump in response to the control signal.